Test Type: CHRONIC

Route: DOSED WATER
Species/Strain: RATS/F 344

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b]

Water disinfection byproducts (Dibromoacetonitrile)

CAS Number: 3252-43-5

Date Report Reqsted: 10/22/2007

Time Report Reqsted: 08:24:14 First Dose M/F: 09/05/01 / 09/05/01

Lab: SRI

E2_Rev.1_R2

C Number: C96015

Lock Date: 04/30/2004

Cage Range: ALL

Date Range: ALL

Reasons For Removal: ALL

Removal Date Range: ALL

Treatment Groups: Include ALL

TDMSE Version: 1.8.0

Route: DOSED WATER

Species/Strain: RATS/F 344

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b]

Water disinfection byproducts (Dibromoacetonitrile)

CAS Number: 3252-43-5

Date Report Reqsted: 10/22/2007

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FISCHER 344 RATS MALE	0 MG/L	50 MG/L	100 MG/L	200 MG/L
Disposition Summary				
Animals Initially in Study	50	50	50	50
Early Deaths Moribund Sacrifice	12	11	22	10
Natural Death	7	6	3	5
Survivors	•	· ·	o	· ·
Terminal Sacrifice	31	33	25	35
Animals Examined Microscopically	50	50	50	50
ALIMENTARY SYSTEM				
Esophagus	(48)	(50)	(50)	(50)
Epithelium, Hyperkeratosis	6 [1.8]	8 [1.6]	34 [1.8]	46 [1.9]
Intestine Large, Cecum	(48)	(49)	(50)	(47)
Inflammation, Chronic	1 [3.0]	, ,	, ,	, ,
Ulcer			1 [3.0]	
Intestine Large, Colon	(48)	(50)	(49)	(47)
Intestine Large, Rectum	(49)	(50)	(50)	(49)
Intestine Small, Duodenum	(49)	(49)	(50)	(48)
Congestion			1 [4.0]	
Intestine Small, Ileum	(46)	(48)	(50)	(47)
Intestine Small, Jejunum	(47)	(46)	(49)	(47)
Liver	(50)	(50)	(50)	(50)
Angiectasis, Focal	1 [2.0]	5 [1.8]	3 [2.0]	3 [1.7]
Congestion Coatia Facel	E [4 0]	4 [2.3]	2 [2.0]	6 [2.5]
Degeneration, Cystic, Focal	5 [1.8]	5 [1.8]	8 [2.3]	4 [1.5]
Fibrosis, Focal	1 [2.0]	2 [4 2]		
Hematopoietic Cell Proliferation	1 [3.0]	3 [1.3]	4 [4 0]	
Hemorrhage	5	e	1 [4.0] 3	2
Hepatodiaphragmatic Nodule Inflammation, Chronic	5 28 [1.8]	6 31 [1.8]	_	2 34 [1.9]
Necrosis	3 [2.0]	31[1.0]	29 [1.8]	3 4 [1.8]
Bile Duct, Hyperplasia	3 [2.0] 45 [2.7]	47 [2.7]	47 [2.7]	46 [2.5]
Hepatocyte, Basophilic Focus	45 [2.7] 26	32	23	40 [2.5] 25
Hepatocyte, Clear Cell Focus	24	22	19	22
Hepatocyte, Cytologic Alterations, Focal	1 [1.0]	5 [2.2]	2 [2.5]	6 [2.3]
Hepatocyte, Cytoplasmic Alteration,	2 [2.5]	→ []	- []	0 [0]

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Route: DOSED WATER

Species/Strain: RATS/F 344

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b]

Water disinfection byproducts (Dibromoacetonitrile)

CAS Number: 3252-43-5

Time Report Regsted: 08:24:14

First Dose M/F: 09/05/01 / 09/05/01

Date Report Regsted: 10/22/2007

FISCHER 344 RATS MALE	0 MG/L	50 MG/L	100 MG/L	200 MG/L
Focal				
Hepatocyte, Eosinophilic Focus	7	8	4	7
Hepatocyte, Mixed Cell Focus	26	24	19	29
Hepatocyte, Necrosis	_5	8 [2.0]	7 [1.9]	4 [1.5]
Hepatocyte, Necrosis, Focal	1 [1.0]	0 [=.0]	. []	. [•]
Hepatocyte, Vacuolization Cytoplasmic	37 [2.1]	37 [2.1]	36 [2.4]	29 [2.3]
Serosa, Fibrosis	۰. <u>۱</u> ــ]	1 [2.0]	00 [=]	_0 ()
Mesentery	(14)	(18)	(18)	(15)
Accessory Spleen	1 [2.0]	1	(13)	(13)
Fibrosis	. [2.0]	·	1 [2.0]	
Pigmentation			1 [2.0]	
Fat, Necrosis, Focal	9 [3.0]	10 [2.9]	12 [2.9]	7 [3.0]
Oral Mucosa	(50)	(50)	(50)	(50)
Erosion	1 [2.0]	(00)	(00)	(00)
Pancreas	(49)	(50)	(50)	(50)
Hyperplasia, Lymphoid	1 [2.0]	()	()	1 [2.0]
Inflammation	1	2 [2.5]		1
Lipomatosis				1 [3.0]
Vacuolization Cytoplasmic			1 [2.0]	
Acinus, Atrophy, Focal	24 [1.8]	37 [1.9]	33 [1.9]	30 [2.1]
Acinus, Atrophy, Diffuse				1 [3.0]
Acinus, Cytoplasmic Alteration	1 [2.0]			
Acinus, Hyperplasia, Focal		1 [2.0]		1 [2.0]
Duct, Cyst	24	21	24	16
Salivary Glands	(50)	(50)	(50)	(50)
Atrophy, Focal	1 [1.0]	• •		1 [1.0]
Vacuolization Cytoplasmic				1 [3.0]
Stomach, Forestomach	(50)	(49)	(50)	(50)
Inflammation			2 [2.5]	
Ulcer	1 [2.0]	1 [1.0]	4 [2.3]	3 [2.7]
Epithelium, Cyst				1
Epithelium, Hyperkeratosis		_	_	1 [1.0]
Epithelium, Hyperplasia	4 [2.5]	2 [1.5]	8 [2.4]	7 [2.1]
Stomach, Glandular	(50)	(50)	(50)	(50)
Cyst				1
Erosion	5 [2.0]	4 [1.8]	5 [2.0]	6 [1.7]
Fibrosis			1 [2.0]	1 [2.0]
Inflammation	4.54.55			1 [2.0]
Inflammation, Focal	1 [1.0]	0.54.51	0.10.01	0.10.71
Ulcer	2 [1.5]	2 [1.5]	3 [2.0]	3 [2.7]

a - Number of animals examined microscopically at site and number of animals with lesion

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Route: DOSED WATER
Species/Strain: RATS/F 344

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b]

Water disinfection byproducts (Dibromoacetonitrile)

CAS Number: 3252-43-5

Time Report Regsted: 08:24:14

Date Report Regsted: 10/22/2007

First Dose M/F: 09/05/01 / 09/05/01

FISCHER 344 RATS MALE	0 MG/L	50 MG/L	100 MG/L	200 MG/L	
Epithelium, Hyperplasia				1 [1.0]	
Glands, Ectasia Glands, Hyperplasia	4 [1.0]	3 [1.0]	3 [1.0] 2 [1.0]	10 [1.9] 2 [2.0]	
Tongue	(50)	(50)	(50)	(50)	
Epithelium, Hyperplasia Tooth	(1)	(0)	1 [2.0] (0)	2 [1.0] (0)	
Malformation	1	(0)	(0)	(5)	
RDIOVASCULAR SYSTEM					
Blood Vessel	(1)	(0)	(1)	(0)	
Aneurysm Hemorrhage	1 [4.0] 1 [4.0]				
Inflammation, Chronic	. [•]		1 [4.0]		
Thrombosis Heart	(50)	(50)	1 [4.0] (50)	(50)	
Cardiomyopathy	39 [2.1]	(50) 44 [1.7]	38 [1.7]	(50) 45 [2.2]	
Thrombosis	2 [3.5]	[]	3 [3.3]	1 [3.0]	
DOCRINE SYSTEM					
Adrenal Cortex	(50)	(50)	(50)	(50)	
Accessory Adrenal Cortical Nodule	3 [1.3]	3 [1.0]	3 [1.0]	2 [1.0]	
Angiectasis Cytoplasmic Alteration, Focal	3 [1.0]	1 [2.0]	2 [2 0]	3 [2.7]	
Hematopoietic Cell Proliferation	3 [1.0] 1 [2.0]		2 [2.0]	3 [2.0]	
Hyperplasia, Focal	5 [2.0]	7 [1.9]	1 [2.0]	8 [1.9]	
Infiltration Cellular, Mixed Cell		1 [2.0]	,	1 [1.0]	
Necrosis		1 [3.0]			
Vacuolization Cytoplasmic	6 [1.8]	3 [1.0]	5 [2.0]	11 [1.8]	
Capsule, Inflammation, Focal Adrenal Medulla	1 [1.0]	(FO)	(40)	(40)	
Adrenai Medulia Hyperplasia	(50) 1 [3.0]	(50)	(49) 1 [4.0]	(49)	
Hyperplasia Hyperplasia, Focal	4 [1.5]	9 [1.4]	5 [1.2]	4 [1.3]	
Necrosis	. [1.0]	1 [3.0]	∪ [1. 2]	. [0]	
Islets, Pancreatic	(49)	(50)	(50)	(50)	
Hyperplasia	3 [2.0]		2 [2.0]	5 [2.0]	
Parathyroid Gland	(46)	(44)	(43)	(47)	
Hyperplasia			2 [2.0]	2 [2.0]	

a - Number of animals examined microscopically at site and number of animals with lesion

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Route: DOSED WATER
Species/Strain: RATS/F 344

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b]

Water disinfection byproducts (Dibromoacetonitrile)

CAS Number: 3252-43-5

Time Report Reqsted: 08:24:14

Date Report Regsted: 10/22/2007

First Dose M/F: 09/05/01 / 09/05/01

FISCHER 344 RATS MALE	0 MG/L	50 MG/L	100 MG/L	200 MG/L	
Pituitary Gland	(50)	(50)	(48)	(49)	
Angiectasis	7 [2.3]	8 [2.1]	3 [2.3]	6 [2.8]	
Cyst	2	3	4	2	
Hemorrhage	5 [2.4]		2 [3.0]	2 [3.5]	
Pars Distalis, Cyst		2	3		
Pars Distalis, Cytoplasmic Alteration, Focal	4 [1.3]	2 [1.5]	3 [1.3]	2 [1.5]	
Pars Distalis, Degeneration, Cystic, Focal	1 [2.0]				
Pars Distalis, Hyperplasia			1 [3.0]	1 [4.0]	
Pars Distalis, Hyperplasia, Focal	6 [2.3]	8 [1.9]	2 [2.0]	5 [2.2]	
Rathke's Cleft, Cyst		1			
Thyroid Gland	(49)	(47)	(49)	(46)	
Cyst		1			
C-cell, Hyperplasia	38 [1.8]	38 [1.5]	45 [1.7]	44 [2.0]	
Follicle, Degeneration, Cystic, Focal	1 [2.0]	1 [1.0]	1 [1.0]		
Follicle, Pigmentation, Focal				1 [2.0]	
Follicular Cell, Hyperplasia, Focal	5 [1.8]	6 [1.5]		4 [1.3]	
Peritoneum Inflammation Mesothelium, Tunica Vaginalis, Hyperplasia Tissue NOS Abdominal, Fibrosis	(2) 2 [2.0] (1)	(6)	(0) (2) 1 [3.0]	(2) 1 [2.0] (1) 1 [3.0]	
Thoracic, Hemorrhage	1 [4.0]		1 [3.0]	1 [5.0]	
GENITAL SYSTEM					
Coagulating Gland Inflammation	(1) 1 [2.0]	(0)	(1)	(0)	
Epididymis Atrophy Fibrosis	(50)	(50) 1 [3.0] 1 [1.0]	(50)	(50)	
Granuloma Sperm		. []		1 [3.0]	
Inflammation	2 [2.5]		1 [2.0]	. [0.0]	
Epithelium, Vacuolization Cytoplasmic	1 [2.0]		٠ [٢٠٠٠]	1 [3.0]	
Preputial Gland	(48)	(50)	(50)	(50)	
i Topuliai Olailu	(+0)	(30)	(30)	(30)	

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Route: DOSED WATER

Species/Strain: RATS/F 344

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Water disinfection byproducts (Dibromoacetonitrile)

CAS Number: 3252-43-5

Date Report Reqsted: 10/22/2007

Time Report Reqsted: 08:24:14 First Dose M/F: 09/05/01 / 09/05/01

FISCHER 344 RATS MALE	0 MG/L	50 MG/L	100 MG/L	200 MG/L	
Cyst			1		
Degeneration, Cystic	1 [3.0]		2 [3.5]	1 [3.0]	
Hyperplasia, Cystic	1 [3.0]	3 [2.0]	1 [3.0]	1 [3.0]	
Inflammation	27 [1.7]	27 [1.5]	24 [1.8]	22 [2.0]	
Prostate	(49)	(50)	(50)	(50)	
Inflammation	36 [2.1]	29 [2.5]	34 [2.5]	33 [2.4]	
Epithelium, Hyperplasia	7 [1.6]	15 [1.5]	5 [1.8]	10 [1.7]	
Seminal Vesicle	(50)	(49)	(50)	(50)	
Atrophy, Focal	(30)	1 [2.0]	(30)	(30)	
Epithelium, Hyperplasia		1 [2.0]	1 [2.0]		
Testes	(50)	(50)	(50)	(50)	
Atrophy	14 [3.1]	10 [3.2]	4 [3.0]	6 [3.2]	
Cyst	14 [3.1]	10 [3.2]	4 [3.0]	0 [3.2]	
Hemorrhage		ı	1 [2 0]	1 [3.0]	
			1 [2.0]		
Inflammation, Granulomatous	0 [4 7]	4 [4 5]	7 [4 7]	1 [3.0]	
Interstitial Cell, Hyperplasia, Focal	3 [1.7]	4 [1.5]	7 [1.7]	2 [2.0]	
MATOPOIETIC SYSTEM Bone Marrow	(50)	(50)	(50)	(50)	
Bone Marrow	(50) 2 [3 0]	(50) 5 [3 0]	(50) 4 [3 0]	(50) 6 [2 8]	
Bone Marrow Hyperplasia	(50) 2 [3.0]	5 [3.0]	(50) 4 [3.0]	6 [2.8]	
Bone Marrow Hyperplasia Hyperplasia, Histiocytic, Focal	2 [3.0]	5 [3.0] 1 [2.0]	4 [3.0]	6 [2.8] 1 [2.0]	
Bone Marrow Hyperplasia Hyperplasia, Histiocytic, Focal Lymph Node		5 [3.0]		6 [2.8] 1 [2.0] (21)	
Bone Marrow Hyperplasia Hyperplasia, Histiocytic, Focal Lymph Node Ectasia	2 [3.0]	5 [3.0] 1 [2.0]	4 [3.0]	6 [2.8] 1 [2.0] (21) 1 [4.0]	
Bone Marrow Hyperplasia Hyperplasia, Histiocytic, Focal Lymph Node Ectasia Fibrosis	2 [3.0]	5 [3.0] 1 [2.0]	4 [3.0]	6 [2.8] 1 [2.0] (21) 1 [4.0] 1 [3.0]	
Bone Marrow Hyperplasia Hyperplasia, Histiocytic, Focal Lymph Node Ectasia Fibrosis Bronchial, Hyperplasia, Lymphoid	2 [3.0]	5 [3.0] 1 [2.0] (24)	4 [3.0]	6 [2.8] 1 [2.0] (21) 1 [4.0]	
Bone Marrow Hyperplasia Hyperplasia, Histiocytic, Focal Lymph Node Ectasia Fibrosis Bronchial, Hyperplasia, Lymphoid Deep Cervical, Hemorrhage	2 [3.0] (26) 1 [3.0]	5 [3.0] 1 [2.0] (24) 1 [3.0]	4 [3.0] (19)	6 [2.8] 1 [2.0] (21) 1 [4.0] 1 [3.0] 1 [3.0]	
Bone Marrow Hyperplasia Hyperplasia, Histiocytic, Focal Lymph Node Ectasia Fibrosis Bronchial, Hyperplasia, Lymphoid Deep Cervical, Hemorrhage Mediastinal, Ectasia	2 [3.0] (26) 1 [3.0] 1 [3.0]	5 [3.0] 1 [2.0] (24) 1 [3.0] 1 [3.0]	4 [3.0] (19) 3 [3.3]	6 [2.8] 1 [2.0] (21) 1 [4.0] 1 [3.0] 1 [3.0]	
Bone Marrow Hyperplasia Hyperplasia, Histiocytic, Focal Lymph Node Ectasia Fibrosis Bronchial, Hyperplasia, Lymphoid Deep Cervical, Hemorrhage Mediastinal, Ectasia Mediastinal, Hemorrhage	2 [3.0] (26) 1 [3.0]	5 [3.0] 1 [2.0] (24) 1 [3.0] 1 [3.0] 2 [3.0]	4 [3.0] (19) 3 [3.3] 1 [3.0]	6 [2.8] 1 [2.0] (21) 1 [4.0] 1 [3.0] 1 [3.0] 1 [3.0] 4 [2.8]	
Bone Marrow Hyperplasia Hyperplasia, Histiocytic, Focal Lymph Node Ectasia Fibrosis Bronchial, Hyperplasia, Lymphoid Deep Cervical, Hemorrhage Mediastinal, Ectasia Mediastinal, Hemorrhage Mediastinal, Hyperplasia, Lymphoid	2 [3.0] (26) 1 [3.0] 1 [3.0]	5 [3.0] 1 [2.0] (24) 1 [3.0] 1 [3.0] 2 [3.0] 2 [3.0]	4 [3.0] (19) 3 [3.3]	6 [2.8] 1 [2.0] (21) 1 [4.0] 1 [3.0] 1 [3.0]	
Bone Marrow Hyperplasia Hyperplasia, Histiocytic, Focal Lymph Node Ectasia Fibrosis Bronchial, Hyperplasia, Lymphoid Deep Cervical, Hemorrhage Mediastinal, Ectasia Mediastinal, Hemorrhage Mediastinal, Hyperplasia, Lymphoid Mediastinal, Pigmentation	2 [3.0] (26) 1 [3.0] 1 [3.0]	5 [3.0] 1 [2.0] (24) 1 [3.0] 1 [3.0] 2 [3.0] 2 [3.0] 1 [3.0]	4 [3.0] (19) 3 [3.3] 1 [3.0] 4 [3.0]	6 [2.8] 1 [2.0] (21) 1 [4.0] 1 [3.0] 1 [3.0] 1 [3.0] 4 [2.8] 1 [3.0]	
Bone Marrow Hyperplasia Hyperplasia, Histiocytic, Focal Lymph Node Ectasia Fibrosis Bronchial, Hyperplasia, Lymphoid Deep Cervical, Hemorrhage Mediastinal, Ectasia Mediastinal, Hemorrhage Mediastinal, Hyperplasia, Lymphoid Mediastinal, Pigmentation Pancreatic, Ectasia	2 [3.0] (26) 1 [3.0] 1 [3.0] 4 [3.0]	5 [3.0] 1 [2.0] (24) 1 [3.0] 1 [3.0] 2 [3.0] 2 [3.0] 1 [3.0] 2 [3.0]	4 [3.0] (19) 3 [3.3] 1 [3.0] 4 [3.0] 1 [3.0]	6 [2.8] 1 [2.0] (21) 1 [4.0] 1 [3.0] 1 [3.0] 1 [3.0] 4 [2.8] 1 [3.0]	
Bone Marrow Hyperplasia Hyperplasia, Histiocytic, Focal Lymph Node Ectasia Fibrosis Bronchial, Hyperplasia, Lymphoid Deep Cervical, Hemorrhage Mediastinal, Ectasia Mediastinal, Hemorrhage Mediastinal, Hyperplasia, Lymphoid Mediastinal, Pigmentation Pancreatic, Ectasia Pancreatic, Hemorrhage	2 [3.0] (26) 1 [3.0] 1 [3.0] 4 [3.0]	5 [3.0] 1 [2.0] (24) 1 [3.0] 1 [3.0] 2 [3.0] 2 [3.0] 1 [3.0] 2 [3.0] 3 [3.0]	4 [3.0] (19) 3 [3.3] 1 [3.0] 4 [3.0]	6 [2.8] 1 [2.0] (21) 1 [4.0] 1 [3.0] 1 [3.0] 1 [3.0] 4 [2.8] 1 [3.0]	
Bone Marrow Hyperplasia Hyperplasia, Histiocytic, Focal Lymph Node Ectasia Fibrosis Bronchial, Hyperplasia, Lymphoid Deep Cervical, Hemorrhage Mediastinal, Ectasia Mediastinal, Hemorrhage Mediastinal, Hyperplasia, Lymphoid Mediastinal, Pigmentation Pancreatic, Ectasia Pancreatic, Hemorrhage Pancreatic, Hyperplasia, Lymphoid	2 [3.0] (26) 1 [3.0] 1 [3.0] 4 [3.0]	5 [3.0] 1 [2.0] (24) 1 [3.0] 1 [3.0] 2 [3.0] 2 [3.0] 1 [3.0] 2 [3.0]	4 [3.0] (19) 3 [3.3] 1 [3.0] 4 [3.0] 1 [3.0] 1 [4.0]	6 [2.8] 1 [2.0] (21) 1 [4.0] 1 [3.0] 1 [3.0] 1 [3.0] 4 [2.8] 1 [3.0]	
Bone Marrow Hyperplasia Hyperplasia, Histiocytic, Focal Lymph Node Ectasia Fibrosis Bronchial, Hyperplasia, Lymphoid Deep Cervical, Hemorrhage Mediastinal, Ectasia Mediastinal, Hemorrhage Mediastinal, Hyperplasia, Lymphoid Mediastinal, Pigmentation Pancreatic, Ectasia Pancreatic, Hemorrhage Pancreatic, Hyperplasia, Lymphoid Pancreatic, Hyperplasia, Lymphoid	2 [3.0] (26) 1 [3.0] 1 [3.0] 4 [3.0] 1 [3.0] 1 [3.0]	5 [3.0] 1 [2.0] (24) 1 [3.0] 1 [3.0] 2 [3.0] 2 [3.0] 1 [3.0] 2 [3.0] 3 [3.0] 1 [3.0]	4 [3.0] (19) 3 [3.3] 1 [3.0] 4 [3.0] 1 [3.0] 1 [4.0] 1 [3.0]	6 [2.8] 1 [2.0] (21) 1 [4.0] 1 [3.0] 1 [3.0] 4 [2.8] 1 [3.0] 2 [2.5] 4 [3.3]	
Bone Marrow Hyperplasia Hyperplasia, Histiocytic, Focal Lymph Node Ectasia Fibrosis Bronchial, Hyperplasia, Lymphoid Deep Cervical, Hemorrhage Mediastinal, Ectasia Mediastinal, Hemorrhage Mediastinal, Hyperplasia, Lymphoid Mediastinal, Pigmentation Pancreatic, Ectasia Pancreatic, Hemorrhage Pancreatic, Hyperplasia, Lymphoid Pancreatic, Hyperplasia, Lymphoid Pancreatic, Pigmentation Lymph Node, Mandibular	2 [3.0] (26) 1 [3.0] 1 [3.0] 4 [3.0] 1 [3.0] 1 [3.0] (1)	5 [3.0] 1 [2.0] (24) 1 [3.0] 1 [3.0] 2 [3.0] 2 [3.0] 1 [3.0] 2 [3.0] 3 [3.0]	4 [3.0] (19) 3 [3.3] 1 [3.0] 4 [3.0] 1 [3.0] 1 [4.0]	6 [2.8] 1 [2.0] (21) 1 [4.0] 1 [3.0] 1 [3.0] 1 [3.0] 4 [2.8] 1 [3.0]	
Bone Marrow Hyperplasia Hyperplasia, Histiocytic, Focal Lymph Node Ectasia Fibrosis Bronchial, Hyperplasia, Lymphoid Deep Cervical, Hemorrhage Mediastinal, Ectasia Mediastinal, Hemorrhage Mediastinal, Hyperplasia, Lymphoid Mediastinal, Pigmentation Pancreatic, Ectasia Pancreatic, Hemorrhage Pancreatic, Hyperplasia, Lymphoid Pancreatic, Hyperplasia, Lymphoid Pancreatic, Hyperplasia, Lymphoid Pancreatic, Pigmentation Lymph Node, Mandibular Ectasia	2 [3.0] (26) 1 [3.0] 1 [3.0] 4 [3.0] 1 [3.0] 1 [3.0] 1 [4.0]	5 [3.0] 1 [2.0] (24) 1 [3.0] 1 [3.0] 2 [3.0] 2 [3.0] 1 [3.0] 2 [3.0] 3 [3.0] 1 [3.0] (0)	4 [3.0] (19) 3 [3.3] 1 [3.0] 4 [3.0] 1 [3.0] 1 [4.0] 1 [3.0] (3)	6 [2.8] 1 [2.0] (21) 1 [4.0] 1 [3.0] 1 [3.0] 4 [2.8] 1 [3.0] 2 [2.5] 4 [3.3]	
Bone Marrow Hyperplasia Hyperplasia, Histiocytic, Focal Lymph Node Ectasia Fibrosis Bronchial, Hyperplasia, Lymphoid Deep Cervical, Hemorrhage Mediastinal, Ectasia Mediastinal, Hemorrhage Mediastinal, Hyperplasia, Lymphoid Mediastinal, Pigmentation Pancreatic, Ectasia Pancreatic, Hemorrhage Pancreatic, Hyperplasia, Lymphoid Pancreatic, Hyperplasia, Lymphoid Pancreatic, Pigmentation Lymph Node, Mandibular	2 [3.0] (26) 1 [3.0] 1 [3.0] 4 [3.0] 1 [3.0] 1 [3.0] (1)	5 [3.0] 1 [2.0] (24) 1 [3.0] 1 [3.0] 2 [3.0] 2 [3.0] 1 [3.0] 2 [3.0] 3 [3.0] 1 [3.0]	4 [3.0] (19) 3 [3.3] 1 [3.0] 4 [3.0] 1 [3.0] 1 [4.0] 1 [3.0]	6 [2.8] 1 [2.0] (21) 1 [4.0] 1 [3.0] 1 [3.0] 4 [2.8] 1 [3.0] 2 [2.5] 4 [3.3]	

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/F 344

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b]

Water disinfection byproducts (Dibromoacetonitrile)

CAS Number: 3252-43-5

Date Report Reqsted: 10/22/2007

Time Report Reqsted: 08:24:14 First Dose M/F: 09/05/01 / 09/05/01

Lab: SRI

FISCHER 344 RATS MALE	0 MG/L	50 MG/L	100 MG/L	200 MG/L	
Ectasia	2 [3.5]	2 [3.0]	2 [3.5]	4 [3.5]	
Fibrosis	1 [3.0]				
Hemorrhage		1 [2.0]	1 [4.0]	2 [2.5]	
Hyperplasia, Histiocytic			1 [3.0]	1 [4.0]	
Hyperplasia, Lymphoid	2 [3.0]	4 [3.0]	2 [3.0]	3 [3.0]	
Spleen	(49)	(50)	(50)	(50)	
Accessory Spleen		1	2 [3.0]		
Congestion	1 [3.0]		2 [2.5]		
Fibrosis, Focal	3 [2.7]		3 [2.3]	1 [3.0]	
Hematopoietic Cell Proliferation	2 [3.0]	4 [3.0]	2 [3.0]	3 [2.7]	
Hemorrhage			1 [3.0]	1 [4.0]	
Hyperplasia, Histiocytic, Focal		1 [4.0]	1 [4.0]	1 [4.0]	
Hyperplasia, Lymphoid		1 [2.0]			
Infiltration Cellular, Mixed Cell			1 [3.0]		
Necrosis, Focal	1 [4.0]		2 [4.0]		
Pigmentation			1 [3.0]		
Lymphoid Follicle, Atrophy			1 [3.0]	1 [3.0]	
Red Pulp, Depletion Cellular	1 [3.0]				
Thymus	(43)	(50)	(44)	(45)	
Atrophy	1 [3.0]				
Ectopic Parathyroid Gland		1 [3.0]			
Hemorrhage	1 [2.0]				
Hyperplasia, Lymphoid				1 [3.0]	
TEGUMENTARY SYSTEM					
Mammary Gland	(46)	(49)	(47)	(46)	
Dilatation	13 [2.5]	9 [2.7]	14 [2.4]	9 [2.3]	
Fibrosis	1 [2.0]			1	
Inflammation, Granulomatous, Focal	1 [3.0]				
Skin	(50)	(50)	(50)	(50)	
Cyst Epithelial Inclusion	2	2	` '	1	
Hyperkeratosis, Focal		2 [3.0]		2 [3.0]	
Inflammation, Focal		1 [3.0]	1 [3.0]		
Ulcer				1 [3.0]	
Epidermis, Hyperplasia, Focal		1 [3.0]	2 [3.0]	1 [3.0]	
Subcutaneous Tissue, Edema				1 [3.0]	

MUSCULOSKELETAL SYSTEM

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/F 344

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b]

Water disinfection byproducts (Dibromoacetonitrile)

CAS Number: 3252-43-5

Date Report Reqsted: 10/22/2007

Time Report Reqsted: 08:24:14 First Dose M/F: 09/05/01 / 09/05/01

FISCHER 344 RATS MALE	0 MG/L	50 MG/L	100 MG/L	200 MG/L	
Bone	(50)	(50)	(50)	(50)	
Fibrous Osteodystrophy Hyperostosis		1 [1.0]		1 [2.0]	
Femur, Hyperostosis		1 [1.0]	1 [2.0]		
Skeletal Muscle	(1)	(3)	(1)	(1)	
Fibrosis	. ,	,	1 [2.0]	. ,	
NERVOUS SYSTEM					
Brain	(50)	(50)	(50)	(50)	
Compression, Focal	5 [3.0]	8 [3.0]	12 [2.9]	9 [3.0]	
Hemorrhage			1 [4.0]		
Hemorrhage, Focal	4 [3.3]	2 [3.0]	3 [2.0]	2 [3.0]	
Peripheral Nerve	(2)	(0)	(4)	(0)	
RESPIRATORY SYSTEM					
Lung	(50)	(50)	(50)	(50)	
Congestion	1 [3.0]	1 [3.0]	2 [2.0]	1 [2.0]	
Hemorrhage			1 [2.0]	1 [3.0]	
Infiltration Cellular, Mixed Cell	0.14.01	2 [3.0]		0.14.01	
Inflammation	2 [1.0]	2 [1.0]		2 [1.0]	
Metaplasia, Osseous, Focal Metaplasia, Squamous, Focal	1 [1.0]		1 [2.0]		
Alveolar Epithelium, Hyperplasia	12 [1.9]	10 [1.7]	8 [1.8]	6 [2.0]	
Serosa, Fibrosis	12 [1.0]	10 [1.7]	0 [1.0]	1 [2.0]	
Nose	(50)	(50)	(50)	(50)	
Foreign Body	` '	, ,	1 [1.0]		
Inflammation			1 [1.0]	2 [2.0]	
Nasolacrimal Duct, Inflammation	2 [1.5]				
Trachea	(50)	(50)	(50)	(50)	
Inflammation				1 [3.0]	
SPECIAL SENSES SYSTEM					
Eye	(48)	(47)	(48)	(47)	
Atrophy	1 [3.0]		1 [3.0]		
Cataract			1 [3.0]		

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b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/F 344

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b]

Water disinfection byproducts (Dibromoacetonitrile)

CAS Number: 3252-43-5

Date Report Reqsted: 10/22/2007

Time Report Reqsted: 08:24:14 First Dose M/F: 09/05/01 / 09/05/01

FISCHER 344 RATS MALE	0 MG/L	50 MG/L	100 MG/L	200 MG/L	
Edema			1 [3.0]		
Retina, Degeneration			1 [3.0]		
Harderian Gland	(50)	(50)	(50)	(50)	
Hyperplasia, Lymphoid, Focal	1 [1.0]				
Inflammation		1 [2.0]			
Epithelium, Hyperplasia, Focal	3 [1.3]	3 [1.3]	1 [1.0]	6 [1.8]	
Zymbal's Gland	(0)	(0)	(2)	(0)	
RINARY SYSTEM					
Kidney	(49)	(50)	(50)	(50)	
Infarct	2 [3.5]	1 [2.0]	2 [2.0]		
Mineralization			1 [1.0]		
Nephropathy	48 [1.8]	47 [1.7]	45 [1.6]	45 [1.5]	
Renal Tubule, Accumulation, Hyaline Droplet	1 [2.0]	7 [2.3]	1 [1.0]	1 [3.0]	
Renal Tubule, Cyst	2			1	
Renal Tubule, Pigmentation	2 [3.0]	2 [3.0]		2 [3.0]	
Urethra	(0)	(1)	(1)	(0)	
Urinary Bladder	(5 0)	(5Ó)	(49)	(50)	
Hemorrhage	1 [3.0]	` '	1 [3.0]	• •	

^{***} END OF MALE ***

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Route: DOSED WATER

Species/Strain: RATS/F 344

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b]

Water disinfection byproducts (Dibromoacetonitrile)

CAS Number: 3252-43-5

Date Report Reqsted: 10/22/2007

Time Report Reqsted: 08:24:14 First Dose M/F: 09/05/01 / 09/05/01

FISCHER 344 RATS FEMALE	0 MG/L	50 MG/L	100 MG/L	200 MG/L
Disposition Summary				
Animals Initially in Study	50	50	50	50
Early Deaths Moribund Sacrifice	9	11	16	12
Natural Death	12	4	5	7
Survivors		·	· ·	•
Terminal Sacrifice	29	35	29	31
Animals Examined Microscopically	50	50	50	50
ALIMENTARY SYSTEM				
Esophagus	(49)	(50)	(50)	(50)
Ulcer				1 [1.0]
Epithelium, Hyperkeratosis	10 [1.7]	8 [1.9]	28 [2.0]	48 [2.0]
Intestine Large, Cecum	(46)	(50)	(47)	(50)
Intestine Large, Colon	(48)	(50)	(49)	(50)
Intestine Large, Rectum Intestine Small, Duodenum	(49)	(49)	(48) (50)	(49) (49)
Intestine Small, Ileum	(49) (45)	(50) (48)	(49)	(49)
Intestine Small, Jejunum	(45) (42)	(48)	(48)	(46)
Liver	(50)	(50)	(50)	(50)
Angiectasis, Focal	2 [1.5]	1 [2.0]	1 [1.0]	3 [2.0]
Congestion	3 [2.0]	5 [2.0]	4 [2.8]	6 [2.3]
Degeneration, Cystic, Focal	1 [2.0]	ر2.0	1 [2.0]	رد.دا
Hematopoietic Cell Proliferation	. [∨]		3 [1.0]	1 [1.0]
Hepatodiaphragmatic Nodule	7	5	6	3
Infiltration Cellular, Lymphocyte		-	1 [2.0]	-
Inflammation, Chronic	35 [1.6]	41 [1.6]	30 [1.4]	34 [1.4]
Thrombosis	1 [2.0]			
Bile Duct, Hyperplasia	29 [1.7]	29 [1.6]	32 [1.6]	29 [1.6]
Hepatocyte, Basophilic Focus	39	47	41	41
Hepatocyte, Clear Cell Focus	11	15	14	14
Hepatocyte, Cytologic Alterations, Focal	6 [2.8]	10 [2.1]	16 [2.5]	16 [2.4]
Hepatocyte, Eosinophilic Focus	2	3	6	1
Hepatocyte, Mixed Cell Focus	14	25	15	25
Hepatocyte, Necrosis	2 [2.5]	1 [1.0]	6 [1.5]	3 [1.0]
Hepatocyte, Syncytial Alteration, Focal	1 [1.0]			

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Route: DOSED WATER

Species/Strain: RATS/F 344

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b]

Water disinfection byproducts (Dibromoacetonitrile)

CAS Number: 3252-43-5

Date Report Reqsted: 10/22/2007

Time Report Reqsted: 08:24:14 First Dose M/F: 09/05/01 / 09/05/01

FISCHER 344 RATS FEMALE	0 MG/L	50 MG/L	100 MG/L	200 MG/L	
Hepatocyte, Vacuolization Cytoplasmic	22 [2.1]	27 [1.5]	29 [2.0]	23 [1.7]	
Mesentery	(20)	(11)	(17)	(15)	
Accessory Spleen	(==)	1	(,	1	
Fat, Necrosis, Focal	14 [2.9]	8 [2.9]	10 [2.9]	11 [2.7]	
Oral Mucosa	(50)	(50)	(50)	(50)	
Hyperplasia	(00)	1 [3.0]	(33)	2 [2.0]	
Pancreas	(50)	(50)	(50)	(50)	
Acinus, Atrophy, Focal	12 [1.9]	20 [1.5]	19 [1.8]	17 [1.9]	
Acinus, Atrophy, Diffuse	12 [1.0]	1 [3.0]	13 [1.0]	17 [1.5]	
Acinus, Cytoplasmic Alteration		1 [0.0]		1 [2.0]	
Acinus, Hyperplasia	1 [3.0]			1 [2.0]	
Acinus, Hyperplasia, Focal	1 [2.0]				
Duct, Cyst	8	13	7	4	
Salivary Glands	(50)	(50)	(50)	(50)	
Atrophy, Focal	1 [1.0]	(30)	(30)	(30)	
Stomach, Forestomach	(50)	(50)	(50)	(50)	
Erosion	(30)	(30)	1 [2.0]	1 [1.0]	
Inflammation		1 [2.0]	1 [3.0]	1 [1.0]	
Ulcer	5 [1.6]	1 [2.0]	1 [3.0] 1 [3.0]	2 [2.0]	
Epithelium, Hyperplasia	4 [2.3]	4 [4 E]	8 [1.9]		
Stomach, Glandular	4 [2.3] (49)	4 [1.5]	(50)	4 [2.5] (50)	
Erosion		(50)			
	4 [1.5]		4 [2.5]	1 [2.0]	
Inflammation, Focal		4 [2 0]		1 [2.0]	
Mineralization		1 [3.0]	2 [2 0]	4 [0 0]	
Ulcer	4 [0.0]		2 [2.0]	1 [2.0]	
Epithelium, Hyperplasia	1 [2.0]	4.54.01	40.14.01	00.14.41	
Glands, Ectasia	10 [1.0]	4 [1.0]	10 [1.0]	26 [1.1]	
Glands, Hyperplasia				2 [1.5]	
Neuroendocrine Cell, Hyperplasia	(50)	(50)	(50)	1 [1.0]	
Tongue	(50)	(50)	(50)	(50)	
Epithelium, Hyperplasia	1 [1.0]	1 [1.0]	2 [1.5]	6 [1.2]	
Tooth	(1)	(0)	(0)	(0)	
Peridontal Tissue, Inflammation	1 [3.0]				
ARDIOVASCULAR SYSTEM					
Heart	(50)	(50)	(50)	(50)	
Cardiomyopathy	34 [1.7]	36 [1.6]	36 [1.4]	35 [1.6]	
Thrombosis	3 [2.3]		2 [3.0]	1 [2.0]	

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Route: DOSED WATER

Species/Strain: RATS/F 344

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b]

Water disinfection byproducts (Dibromoacetonitrile)

CAS Number: 3252-43-5

Date Report Reqsted: 10/22/2007

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Endocardium, Hyperplasia	
ENDOCRINE SYSTEM Adrenal Cortex (50) (50) (50) (50) Accessory Adrenal Cortical Nodule 6 [1.3] 1 [1.0] 1 [2.0] 2 [1.0] Angiectasis 5 [2.6] 1 [3.0] 3 [2.3] 1 [3.0] Cytoplasmic Alteration, Focal 2 [2.0] 4 [2.0] 1 [2.0] Hyperplasia 1 [4.0] Hyperplasia, Focal 2 [1.5] 9 [2.0] 10 [1.9] 8 [2.0] Infiltration Cellular, Mixed Cell Necrosis Pigmentation 1 [3.0]	
Adrenal Cortex (50) (50) (50) (50) (50) Accessory Adrenal Cortical Nodule 6 [1.3] 1 [1.0] 1 [2.0] 2 [1.0] Angiectasis 5 [2.6] 1 [3.0] 3 [2.3] 1 [3.0] Cytoplasmic Alteration, Focal 2 [2.0] 4 [2.0] 1 [2.0] Hyperplasia 1 [4.0] Hyperplasia, Focal 2 [1.5] 9 [2.0] 10 [1.9] 8 [2.0] Infiltration Cellular, Mixed Cell Necrosis Pigmentation 1 [3.0]	
Accessory Adrenal Cortical Nodule 6 [1.3] 1 [1.0] 1 [2.0] 2 [1.0] Angiectasis 5 [2.6] 1 [3.0] 3 [2.3] 1 [3.0] Cytoplasmic Alteration, Focal 2 [2.0] 4 [2.0] 1 [2.0] Hyperplasia 1 [4.0] Hyperplasia, Focal 2 [1.5] 9 [2.0] 10 [1.9] 8 [2.0] Infiltration Cellular, Mixed Cell Necrosis 1 [3.0]	
Accessory Adrenal Cortical Nodule 6 [1.3] 1 [1.0] 1 [2.0] 2 [1.0] Angiectasis 5 [2.6] 1 [3.0] 3 [2.3] 1 [3.0] Cytoplasmic Alteration, Focal 2 [2.0] 4 [2.0] 1 [2.0] Hyperplasia 1 [4.0] Hyperplasia, Focal 2 [1.5] 9 [2.0] 10 [1.9] 8 [2.0] Infiltration Cellular, Mixed Cell Necrosis 1 [3.0]	
Angiectasis 5 [2.6] 1 [3.0] 3 [2.3] 1 [3.0] Cytoplasmic Alteration, Focal 2 [2.0] 4 [2.0] 1 [2.0] Hyperplasia 1 [4.0] Hyperplasia, Focal 2 [1.5] 9 [2.0] 10 [1.9] 8 [2.0] Infiltration Cellular, Mixed Cell Necrosis Pigmentation 1 [3.0]	
Cytoplasmic Alteration, Focal 2 [2.0] 4 [2.0] 1 [2.0] Hyperplasia 1 [4.0] Hyperplasia, Focal 2 [1.5] 9 [2.0] 10 [1.9] 8 [2.0] Infiltration Cellular, Mixed Cell 1 [1.0] 2 [1.5] Necrosis 1 [3.0] Pigmentation 1 [3.0]	
Hyperplasia 1 [4.0] Hyperplasia, Focal 2 [1.5] 9 [2.0] 10 [1.9] 8 [2.0] Infiltration Cellular, Mixed Cell 1 [1.0] 2 [1.5] Necrosis 1 [3.0] Pigmentation 1 [3.0]	
Hyperplasia, Focal 2 [1.5] 9 [2.0] 10 [1.9] 8 [2.0] Infiltration Cellular, Mixed Cell 1 [1.0] 2 [1.5] Necrosis 1 [3.0] Pigmentation 1 [3.0]	
Infiltration Cellular, Mixed Cell 1 [1.0] 2 [1.5] Necrosis 1 [3.0] Pigmentation 1 [3.0]	
Necrosis 1 [3.0] Pigmentation 1 [3.0]	
Pigmentation 1 [3.0]	
Vacuolization Cytoplasmic 9 [1.9] 8 [1.8] 9 [1.8] 6 [1.5]	
Adrenal Medulla (49) (50) (50) (50)	
Angiectasis (49) (50) (50) (50)	
Hyperplasia, Focal 2 [1.5] 2 [1.5] 1 [2.0] 5 [1.2] Infiltration Cellular, Mixed Cell 1 [2.0]	
Vacuolization Cytoplasmic, Focal 1 [2.0]	
Islets, Pancreatic (50) (50) (50) (49)	
Hyperplasia 1 [2.0] 1 [2.0]	
Parathyroid Gland (42) (43) (43)	
Atrophy 1 [2.0]	
Hyperplasia 1 [2.0]	
Pituitary Gland (49) (48) (50) (50)	
Angiectasis 6 [2.8] 3 [3.0] 5 [3.0] 7 [3.0]	
Cyst 5 3 2 4	
Fibrosis, Focal 1 [3.0]	
Hemorrhage 6 [2.5] 4 [3.3] 2 [2.0]	
Hyperplasia, Histiocytic, Focal 1 [4.0]	
Pars Distalis, Cyst 4 6 5 12	
Pars Distalis, Cytoplasmic Alteration, 1 [1.0] 2 [2.0] 2 [1.5]	
Focal	
Pars Distalis, Hyperplasia 2 [3.0]	
Pars Distalis, Hyperplasia, Focal 8 [2.3] 7 [2.4] 9 [2.4] 10 [2.2]	
Pars Intermedia, Hyperplasia, Focal 1 [2.0]	
Pars Intermedia, Vacuolization 1 [2.0]	
Cytoplasmic, Focal	
Rathke's Cleft, Cyst 1 1 1 1	

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b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Route: DOSED WATER

Species/Strain: RATS/F 344

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b]

Water disinfection byproducts (Dibromoacetonitrile)

CAS Number: 3252-43-5

Date Report Reqsted: 10/22/2007

Time Report Reqsted: 08:24:14 First Dose M/F: 09/05/01 / 09/05/01

FISCHER 344 RATS FEMALE	0 MG/L	50 MG/L	100 MG/L	200 MG/L	
Thyroid Gland C-cell, Hyperplasia	(46) 38 [1.8]	(48) 44 [1.8]	(48) 45 [1.8]	(46) 42 [2.0]	
GENERAL BODY SYSTEM					
None					
GENITAL SYSTEM					
Clitoral Gland Cyst	(50)	(50)	(47)	(50) 1	
Degeneration, Cystic Hyperplasia	2 [2.0]	2 [2.5] 1 [2.0]	4 [2.5]	6 [3.2]	
Hyperplasia, Cystic Inflammation Metaplasia, Squamous	4 [2.8] 7 [2.6]	3 [2.0] 2 [2.5]	8 [2.0] 1 [3.0] 1 [3.0]	4 [2.3] 3 [2.7]	
Ovary Angiectasis	(50) 1 [2.0]	(50)	(50)	(50)	
Cyst Oviduct	3 (1)	4 (0)	3 (1)	6 (0)	
Uterus Decidual Reaction	(50)	(50) (50) 1 [3.0]	(50)	(50)	
Hemorrhage Cervix, Hypertrophy	1 [4.0] 1 [3.0]	2 [3.0]		1 [3.0]	
Endometrium, Hyperplasia, Cystic Vagina	32 [2.1] (6)	38 [1.8] (2)	39 [1.7] (7)	32 [1.7] (7)	
Inflammation Inflammation, Suppurative	1 [2.0]	1 [2.0]	1 [2.0]	2 [3.0]	
Epithelium, Cyst			1	1	
HEMATOPOIETIC SYSTEM					
Bone Marrow Hyperplasia Hyperplasia, Histiocytic, Focal Hyperplasia, Reticulum Cell, Diffuse Inflammation, Granulomatous	(49) 3 [3.0] 1 [3.0]	(50) 1 [2.0] 1 [3.0] 1 [3.0]	(50) 5 [3.0]	(50) 2 [3.0] 1 [2.0]	
Lymph Node	(21)	1 [2.0] (15)	(23)	(15)	

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Route: DOSED WATER

Species/Strain: RATS/F 344

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b]

Water disinfection byproducts (Dibromoacetonitrile)

CAS Number: 3252-43-5

Date Report Reqsted: 10/22/2007

Time Report Reqsted: 08:24:14 First Dose M/F: 09/05/01 / 09/05/01

FISCHER 344 RATS FEMALE	0 MG/L	50 MG/L	100 MG/L	200 MG/L	
Congestion			1 [3.0]		
Deep Cervical, Hemorrhage	1 [3.0]		1 [3.0]		
Mediastinal, Ectasia	1 [3.0]		4 [3.0]		
Mediastinal, Hemorrhage	7 [2.9]	6 [2.7]	6 [3.0]	3 [3.0]	
Mediastinal, Hyperplasia, Histiocytic	. []	- []	1 [3.0]	- []	
Mediastinal, Hyperplasia, Lymphoid	1 [3.0]	2 [3.0]	4 [2.8]	2 [2.5]	
Mediastinal, Inflammation,	1 [1.0]	_[]	. [=]	_ []	
Granulomatous	. []				
Mediastinal, Pigmentation		1 [3.0]		1 [3.0]	
Pancreatic, Amyloid Deposition			1 [3.0]	[]	
Pancreatic, Ectasia	1 [3.0]		F1		
Pancreatic, Hemorrhage	3 [3.0]	2 [3.0]	2 [3.0]	2 [3.0]	
Pancreatic, Inflammation, Granulomatous	1 [2.0]	L1		[]	
Lymph Node, Mandibular	(3)	(2)	(2)	(2)	
Ectasia	1 [3.0]	()	,	· ,	
Lymph Node, Mesenteric	(50)	(50)	(50)	(50)	
Ectasia	1 [3.0]	, ,	2 [3.0]	1 [3.0]	
Hemorrhage			1 [2.0]		
Hyperplasia, Lymphoid	2 [3.0]	1 [2.0]		2 [3.0]	
Inflammation, Granulomatous	1 [2.0]	1 [2.0]			
Pigmentation	1 [2.0]				
Spleen	(50)	(50)	(50)	(50)	
Hematopoietic Cell Proliferation	4 [2.8]	2 [2.5]	4 [3.3]	5 [2.6]	
Hyperplasia, Histiocytic, Focal	2 [3.0]				
Inflammation, Granulomatous	1 [3.0]	1 [3.0]			
Pigmentation	6 [3.0]			1 [3.0]	
Lymphoid Follicle, Atrophy				1 [3.0]	
Thymus	(48)	(49)	(48)	(49)	
Hemorrhage				1 [3.0]	
Hyperplasia, Lymphoid	2 [3.0]	1 [3.0]			
NTEGUMENTARY SYSTEM					
Mammary Gland	(49)	(50)	(50)	(50)	
Dilatation	38 [2.9]	41 [2.7]	33 [2.8]	32 [2.9]	
Fibrosis	_	1 [3.0]	2 [3.0]	1 [3.0]	
Galactocele	2	(m =)	(= - ·	1	
Skin	(50)	(50)	(50)	(49)	
Cyst Epithelial Inclusion			1		

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Route: DOSED WATER
Species/Strain: RATS/F 344

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b]

Water disinfection byproducts (Dibromoacetonitrile)

CAS Number: 3252-43-5

Date Report Reqsted: 10/22/2007

Time Report Reqsted: 08:24:14 First Dose M/F: 09/05/01 / 09/05/01

FISCHER 344 RATS FEMALE	0 MG/L	50 MG/L	100 MG/L	200 MG/L	
Ulcer	1 [3.0]	1 [2.0]		1 [2.0]	
Subcutaneous Tissue, Fibrosis, Focal	1 [2.0]		4 [0 0]		
Subcutaneous Tissue, Necrosis, Fatty			1 [3.0]		
IUSCULOSKELETAL SYSTEM					
Bone	(50)	(50)	(50)	(50)	
Hyperostosis				1 [2.0]	
Cranium, Hyperostosis	(0)	(0)	1 [2.0]	(0)	
Skeletal Muscle	(3)	(0)	(0)	(0)	
NERVOUS SYSTEM					
Brain	(50)	(50)	(50)	(50)	
Compression, Focal	12 [2.7]	12 [2.8]	19 [2.8]	6 [2.5]	
Hemorrhage, Focal	2 [2.5]	1 [1.0]	1 [1.0]	2 [2.0]	
Spinal Cord	(5)	(3)	(2)	(4)	
Atrophy, Focal	1 [3.0]				
Hemorrhage, Focal				1 [3.0]	
RESPIRATORY SYSTEM					
Lung	(50)	(50)	(50)	(50)	
Congestion	3 [2.0]	1 [3.0]	1 [2.0]	2 [2.0]	
Hemorrhage	1 [1.0]		1 [2.0]	2 [2.5]	
Hyperplasia, Histiocytic, Focal		1 [2.0]			
Inflammation	3 [1.7]	1 [2.0]	3 [1.3]	7 [1.4]	
Metaplasia, Squamous, Focal	1 [2.0]	5	0.10.01	5 (0.01	
Alveolar Epithelium, Hyperplasia	10 [1.9]	5 [1.2]	2 [2.0]	5 [2.0]	
Interstitium, Edema	1 [2.0]	(50)	(50)	(50)	
Nose	(50)	(50)	(50)	(50)	
Nasolacrimal Duct, Inflammation Trachea	(50)	1 [2.0]	(E0)	1 [2.0]	
Haunea	(50)	(50)	(50)	(50)	
SPECIAL SENSES SYSTEM					
Eye	(47)	(50)	(50)	(48)	
Atrophy		2 [3.0]	1 [3.0]	3 [3.0]	

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Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/F 344

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b]

Water disinfection byproducts (Dibromoacetonitrile)

CAS Number: 3252-43-5

Date Report Reqsted: 10/22/2007

Time Report Reqsted: 08:24:14 First Dose M/F: 09/05/01 / 09/05/01

FISCHER 344 RATS FEMALE	0 MG/L	50 MG/L	100 MG/L	200 MG/L
Cataract	3 [2.7]	2 [3.0]		
Exudate	1 [3.0]	21		
Retina, Degeneration	2 [3.0]	2 [3.0]		
Harderian Gland	(50)	(50)	(50)	(50)
Degeneration, Cystic, Focal	,	,	,	1 [2.0]
Hyperplasia, Lymphoid, Focal	1 [2.0]			
Inflammation			1 [1.0]	
Epithelium, Hyperplasia, Focal	4 [1.3]		1 [1.0]	1 [2.0]
Zymbal's Gland	(0)	(0)	(1)	(0)
RINARY SYSTEM Kidney Congestion	(50)	(49)	(50)	(49) 1 [3.0]
				1 [0.0]
	1 [1.0]	1 [2.0]		
Infarct	1 [1.0]	1 [2.0]	1 [2.0]	4 [3.3]
	1 [1.0]		1 [2.0]	
Infarct Infiltration Cellular, Lymphocyte	33 [1.1]	1 [2.0] 1 [3.0] 36 [1.2]	1 [2.0] 44 [1.3]	
Infarct Infiltration Cellular, Lymphocyte Mineralization Nephropathy Pelvis, Inflammation, Chronic	33 [1.1] 1 [2.0]	1 [3.0] 36 [1.2]	44 [1.3]	4 [3.3] 43 [1.3] 7 [2.0]
Infarct Infiltration Cellular, Lymphocyte Mineralization Nephropathy	33 [1.1]	1 [3.0]		4 [3.3] 43 [1.3]
Infarct Infiltration Cellular, Lymphocyte Mineralization Nephropathy Pelvis, Inflammation, Chronic Renal Tubule, Accumulation, Hyaline Droplet Renal Tubule, Cyst	33 [1.1] 1 [2.0]	1 [3.0] 36 [1.2]	44 [1.3] 17 [2.2]	4 [3.3] 43 [1.3] 7 [2.0]
Infarct Infiltration Cellular, Lymphocyte Mineralization Nephropathy Pelvis, Inflammation, Chronic Renal Tubule, Accumulation, Hyaline Droplet Renal Tubule, Cyst Renal Tubule, Hyperplasia, Focal	33 [1.1] 1 [2.0] 11 [2.4]	1 [3.0] 36 [1.2]	44 [1.3]	4 [3.3] 43 [1.3] 7 [2.0]
Infarct Infiltration Cellular, Lymphocyte Mineralization Nephropathy Pelvis, Inflammation, Chronic Renal Tubule, Accumulation, Hyaline Droplet Renal Tubule, Cyst	33 [1.1] 1 [2.0]	1 [3.0] 36 [1.2]	44 [1.3] 17 [2.2]	4 [3.3] 43 [1.3] 7 [2.0]

^{***} END OF REPORT ***

a - Number of animals examined microscopically at site and number of animals with lesion

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